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 Email: CinnAsblab@emsl.com

EMSL Order: 042327002  
 Customer ID: TTRA62  
 Customer PO: 103S864023138  
 Project ID:

Attn: *Eric Jensen*  
*Tetra Tech EMI, Inc.*  
*737 Bishop Street*  
*Suite 2340*  
*Honolulu, HI, 96813*

Phone: (808) 441-6600  
 Fax: N/A  
 Collected: 11/08/2023  
 Received: 11/16/23 9:20

Project: **DPH Maui Wildfire Ash Sample - LAHAINA ASH DU-1**

Analyzed: 11/17/23

## SUMMARY REPORT : TEM EPA 600/R-93/116

### Analysis of Bulk Material Utilizing Analytical Electron Microscopy (Section 2.5.5.2) without Milling Prep

| Sample ID                      | Minerals Present       | Results            | Structures | Reporting Limit | Asbestos Weight  | Comments |
|--------------------------------|------------------------|--------------------|------------|-----------------|------------------|----------|
| LAHAINA ASH DU-1               | No Structures Detected | Regulated Asbestos | 0          | 0.1%            | < 0.1%           |          |
| 042327002-0001                 |                        | Other Minerals     | 0          |                 | < 0.1%           |          |
| ASH - LAHAINA, MAUI,<br>HAWAII |                        | <b>Total</b>       | <b>0</b>   |                 | <b>&lt; 0.1%</b> |          |
|                                |                        | Undetermined       | 0          |                 | -----            |          |

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**P. Harrison**  
 Analyst

*Samantha Rumpff*  
 Approved Signatory

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 Project ID: 138

**Attn:** Eric Jensen  
 Tetra Tech EMI, Inc.  
 737 Bishop Street  
 Suite 2340  
 Honolulu, HI, 96813

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## TEM EPA 600/R-93/116

Analysis of Bulk Material Utilizing Analytical Electron Microscopy (Section 2.5.5.2) without Milling Prep

### Detailed Sample Report

| <b>Customer Sample Number:</b> LAHAINA ASH DU-1        |                      | <b>Reporting Limit :</b> 0.1%                      |                      |
|--|----------------------|--|----------------------|
| <b>Sample Description:</b> ASH - LAHAINA, MUAI, HAWAII |                      |  |                      |
| EMSL Sample Number: 042327002-0001                     |                      | Sample Matrix: Bulk                                |                      |
| Aspect ratio for fiber definition: 3:1                 |                      | Area of collection filter (mm <sup>2</sup> ): 1342 |                      |
| Minimum Length (µm): 0.5                               |                      | Grid Opening Area (mm <sup>2</sup> ): 0.0061       |                      |
| Gravimetric Reduction Ratio: 1.00                      |                      | Grid Openings Analyzed: 10                         |                      |
| Mass contributed by Largest fiber: N/A                 |                      | Analyst: P. Harrison                               |                      |
| Mineral Type   | Stuctures            | Weight %   | Average Aspect Ratio |
| <b>Total Regulated Asbestos</b>                        | <b>None Detected</b> | <b>&lt; 0.1%</b>                                   |                      |
| Chrysotile   | None Detected        | <0.1%  |                      |
| Amosite  | None Detected        | <0.1%  |                      |
| Crocidolite  | None Detected        | <0.1%  |                      |
| Tremolite  | None Detected        | <0.1%  |                      |
| Actinolite   | None Detected        | <0.1%  |                      |
| Anthophyllite  | None Detected        | <0.1%  |                      |
| <b>Total Other Elongate Mineral Types</b>              | <b>None Detected</b> | <b>&lt; 0.1%</b>                                   |                      |
| <b>Undetermined Elongate Mineral</b>                   | <b>None Detected</b> | <b>-</b>   |                      |

Laboratory Manager or Other Approved Signatory

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